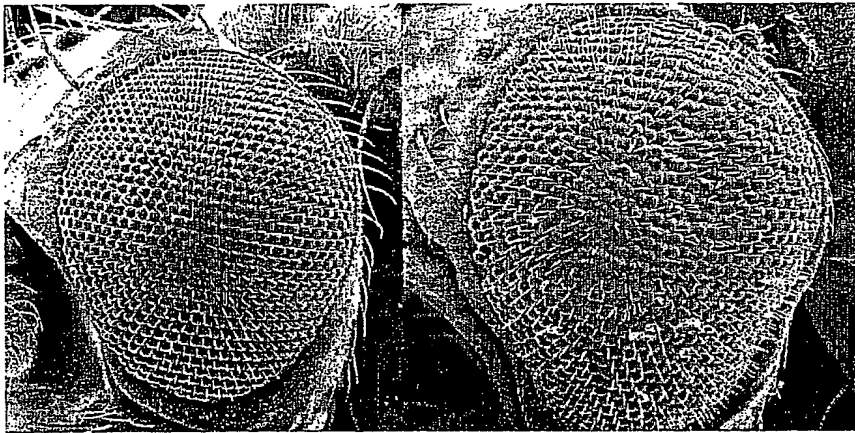


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Fig. 1A

Fig. 1B



wild type

ELP mutant

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FIG. 2

(↓ *Drosophila* mutants)

↓

d-epsin 1 MVDKFSMWKVRELADKVTNVVMNYEETEGKVREATND DPWGPFGPLMOEAYSTFSVET  
h-epsin 1 ....MNNMWKVRELVDKATNVVMNYEETESKVREATND DPWGPFGOLMGEHAKATRMVEO

d-epsin 61 FPEFMSMLWKRLQDNKTNWRRTYKSLLLNLNLRNGSERVVTSSREHIYDLRSLENYTF  
h-epsin 57 FPEFMSMLWSRMLKDNKKNWRRVYKSLLLNLNLRNGSERVVTSSREHIYDLRSLENYTF

d-epsin 121 TDEGCKDQGINVRHKVRELTFEIQDDRLREERKKAKKNKDKYVGNSSDAMGMRSGGNSG  
h-epsin 117 VDEHCKDQGINVROKVRELTFEIPAQDDRLREERKKAKKNKDKYVGNSSDSN....GGER.

d-epsin 181 YSGSGSGGGGGSGGYNDGPRSSSGDNWYSDK...SADKDRYEDDDHYDGEREGS SDS  
h-epsin 172 YSER.YDPEPKSKW...DEEDKNKSAFPESDKLGELSDKIGSTIDDTISKFRKDR DS

↓

d-epsin 238 FSPFRNYRYNPPASPAEVASEKPPSSLNMNPRSKTVSSPVSKQPTSTASAKPALSOKKD  
h-epsin 227 PE.RCSDSDERKARRGRSPKGEFKDEETPTKREHITQATETPTKREHITANPSKTD

d-epsin 298 LGAAANF...GKPAPGGAAGIEPTHRDTPSVVDMGGASPSPTSKANNVQSNNNLLD  
h-epsin 287 LGAAAHITGDKASPDQNASTHPP.QSSVKTSPVSSKSSGDLVDLFDGTSSTGGSADLFG

d-epsin 354 DL...PKKCSPPPG...QEKTLNSIAVIVDDDDDFNPRASDSQQEFGEFASAFGQPSAGST  
h-epsin 346 GFADFGSAAASGSFSPQVTATSCNGDFGWSAEN.QAPSPVASSGEFSGSASQPAVELV

d-epsin 413 ISEPPSTGLVPAA...NDEFADFAFOSTTSISALDGNITKATPANDSFDNFNSAPTS  
h-epsin 405 SGSQSALGPPPAASNSSDLFDLMSSQAMTSSQSNFSSNLSINT.VGLGLPMSRSQNTD

d-epsin 469 TAAATATDILLAGLDLSHQSY...NDNMPEPIPAVTG.NNKPMSPTNNN...NTNG  
h-epsin 464 MVQKEVSKTLPSTWSDPSNINISDNLIPCMQBSKEQQPSLNTLQQQNQQPMNVMTQSF

d-epsin 524 GAVPAAASVSTAVGATWEGDLKGGKMNEDDNNHMSKSG.KPSFPAPSMNALKTNPAK  
h-epsin 524 GAVNLSSPSMLPV.RPQNALIGCPMPSPFPAWGTGTMGMAFLNTFMNQSMMGMNMN

d-epsin 583 APIINVQTGGCFPLSPMTSPNIFGAPAPQQEIPQNSAFANFFAFQQQQQNHSSNNWNSS  
h-epsin 583 IGISA.AGMELTGTMGMGMPNI...AMTSGTQPKQDAFANFANFSK.....

d-epsin 643 SAFDLFQ  
h-epsin 626 .....

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Fig. 3

|           |   |     |
|-----------|---|-----|
| h-18aaELP | MLNMWKVRELVDKATNVVMNYSEIESKVREATNDPWPGPSQLMGEIAKATFMYEQFPPEL  | 60  |
| h-ELP     | MLNMWKVRELVDKATNVVMNYSEIESKVREATNDPWPGPSQLMGEIAKATFMYEQFPPEL  | 60  |
| *****     |   |     |
| h-18aaELP | MNMLWSRMLKDNKKNWRRVYKSLLLLAYLIRNGSERVVTSAREHIYDLRSLENYHFVDEH  | 120 |
| h-ELP     | MNMLWSRMLKDNKKNWRRVYKSLLLLAYLIRNGSERVVTSAREHIYDLRSLENYHFVDEH  | 120 |
| *****     |   |     |
| h-18aaELP | GKDQGINIROQVKELVEFAQDDDLREERKKAKKNKDKYVGVSDDSVGGFRYSERYDPEP   | 180 |
| h-ELP     | GKDQGINIROQVKELVEFAQDDDLREERKKAKKNKDKYVGVSDDSVGGFRYSERYDPEP   | 180 |
| *****     |   |     |
| h-18aaELP | KSKWDEEWDKNKSAFPFSDKLGEISDKIGSTIDDTISKFRKDRSDSPERCSDSDEEKKKA  | 240 |
| h-ELP     | KSKWDEEWDKNKSAFPFSDKLGEISDKIGSTIDDTISKFRKDRSDSPERCSDSDEEKKKA  | 240 |
| *****     |   |     |
| h-18aaELP | RRGRSPKGEFKDEEETVTTKHIHITQATETTTTRHKRTANPSKTIDLGAAGHYTGDKASP  | 300 |
| h-ELP     | RRGRSPKGEFKDEEETVTTKHIHITQATETTTTRHKRTANPSKTIDLGAAGHYTGDKASP  | 300 |
| *****     |   |     |
| h-18aaELP | DQNASTHTPQSSVKTSVPSSKSSGDLVDLFDGTSQSTGGSADLFGGFADFGSAAASGSFP  | 360 |
| h-ELP     | DQNASTHTPQSSVKTSVPSSKSSGDLVDLFDGTSQSTGGSADLFGGFADFGSAAASGSFP  | 360 |
| *****     |   |     |
| h-18aaELP | SQVTATSGNGDFGDWSAFNQAPSGPVASSGEFFGSASQPAVELVSGSQSALGPPPAASNS  | 420 |
| h-ELP     | SQVTATSGNGDFGDWSAFNQAPSGPVASSGEFFGSASQPAVELVSGSQSALGPPPAASNS  | 420 |
| *****     |   |     |
| h-18aaELP | SDLFDLMGSSQATMTSSQSMNFSMMSTNTVGLGLPMSRSQPLQNVSTVLQKPNPLYNQNT  | 480 |
| h-ELP     | SDLFDLMGSSQATMTSSQSMNFSMMSTNTVGLGLPMSRSQ-----NT               | 462 |
| *****     |   |     |
| h-18aaELP | DMVQKSVSKTLPSTWSDPSVNIISLDNLLPGMQPSKPQQPSLNTMIQQQNMQQPMNVMTQS | 540 |
| h-ELP     | DMVQKSVSKTLPSTWSDPSVNIISLDNLLPGMQPSKPQQPSLNTMIQQQNMQQPMNVMTQS | 522 |
| *****     |   |     |
| h-18aaELP | FGAVNLSSPSNMLPVRPQTNALIGGPMMPMSMPNVMTGTMGMAPLGNTPMMNQSMGMNMN  | 600 |
| h-ELP     | FGAVNLSSPSNMLPVRPQTNALIGGPMMPMSMPNVMTGTMGMAPLGNTPMMNQSMGMNMN  | 582 |
| *****     |   |     |
| h-18aaELP | IGMSAAGMGLTGTMGMGMPNIAMTSGTVQPKQDAFANFANFSK                   | 643 |
| h-ELP     | IGMSAAGMGLTGTMGMGMPNIAMTSGTVQPKQDAFANFANFSK                   | 625 |
| *****     |   |     |

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Fig. 4A

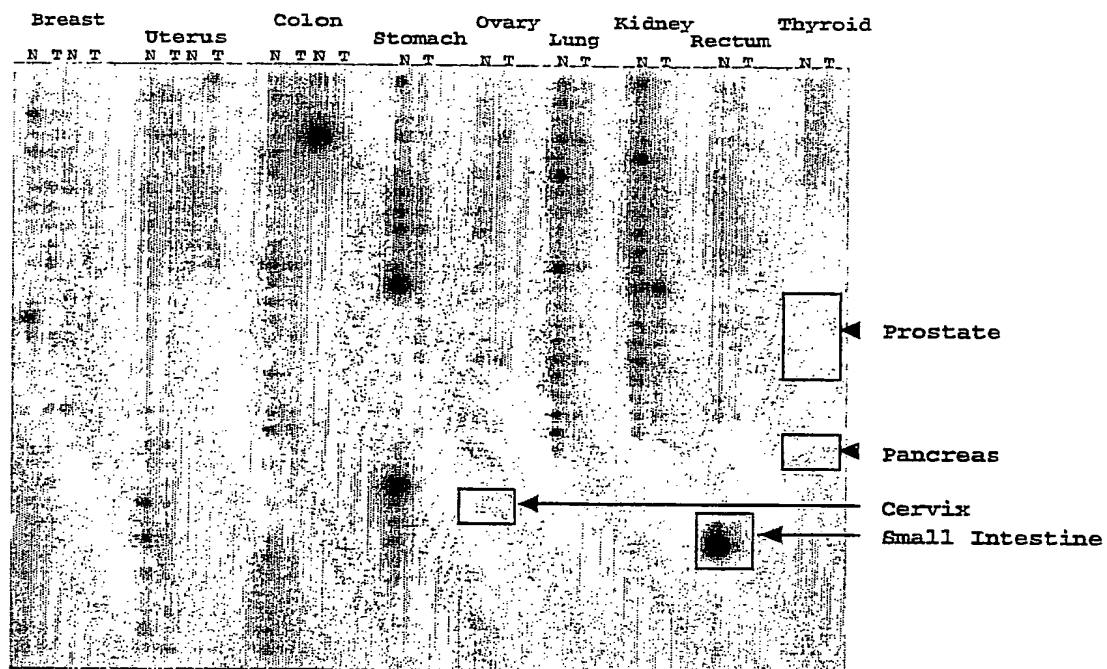
brain  
Heart  
skeletal muscle  
colon  
thymus  
spleen  
kidney  
liver  
small intestine  
placenta  
lung  
peripheral blood leukocyte

Fig. 4B

promyelocytic leukemia HL-60  
HeLa S3  
chronic myelogenous leukemia K-562  
lymphoblastic leukemia MOLT-4  
Burkitt's lymphoma Raji  
colorectal adenocarcinoma SW480  
lung carcinoma A549  
melanoma G-361

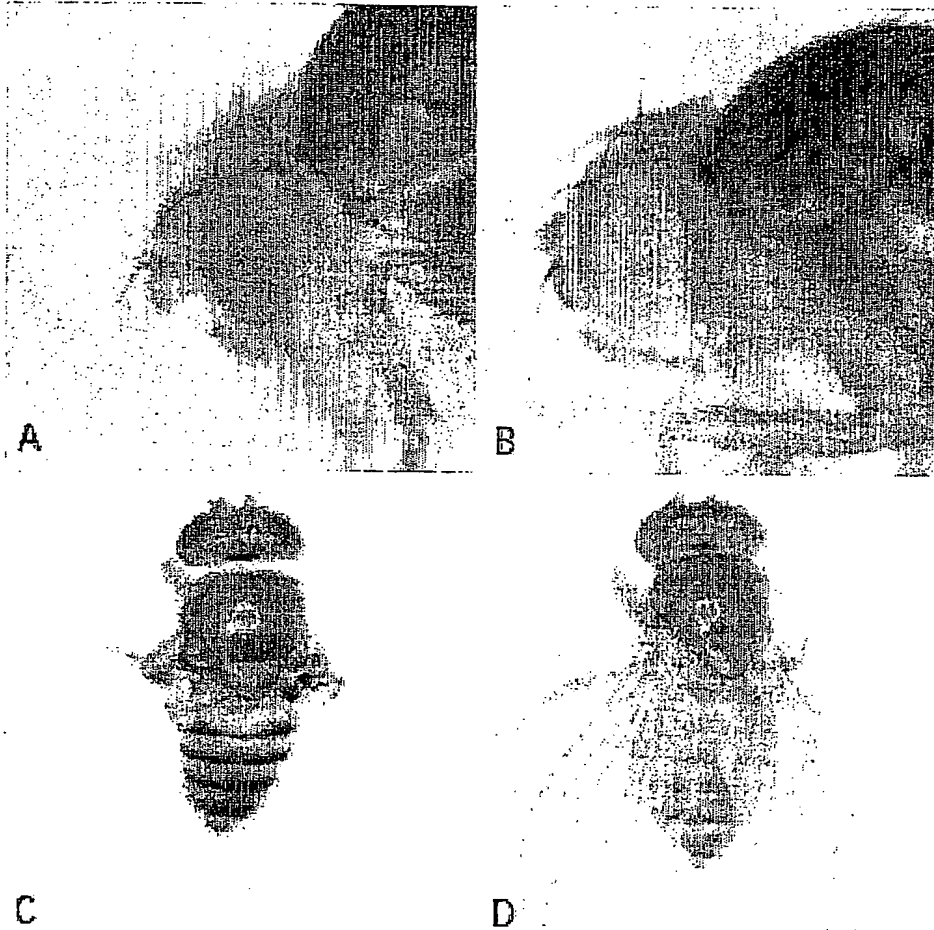
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Fig. 5



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Fig. 6



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